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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,103	10/26/2000	Joachim Zimmer	1356	1589

7590

07/23/2003

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EXAMINER

COLE, LAURA C

ART UNIT

PAPER NUMBER

1744

8

DATE MAILED: 07/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,103

Applicant(s)

ZIMMER, JOACHIM

Examiner

Laura C Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 9, 12, and 13 are objected to because of the following informalities:
Claim 9 Line 2 there it appears that there is a misspelling of the word "cross-sectional". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 and 16, Lines 7-8, both recite "...the axle is arranged at a side of the steering lever which faces away of a wiper blade." It is unclear what Applicant intends by "side" and "away" as there is no directions, sides, or wiper blade indicated in the drawing that would clarify. Is the axle mounted on the steering lever at the further point from the wiper blade or does the axle extending in a vertical direction from a side of the steering lever?

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Folberth et al., USPN 1,571,516.

Folberth et al. discloses a windshield cleaner comprising a wiper arm (Figure 1 (9)) which is driven via a lever mechanism that has a drive lever (Figure 1 (13)) connected in a manner fixed against relative rotation to the drive shaft (Figure 2 (10) is the drive shaft and a set screw (Figure 1 (14)) forms the connection, see also Page 1 lines 71 to 84), a steering lever (Figure 1 (23)) connected to an axle (noted by pin (Figures 1-3 (25)) which is pivotally connected to a wiper lever (Figure 1 (29)) characterized in that the steering lever (Figure 1 (23)) is braced in a mounting direction (see Figures 2-3 for direction) on a bearing shoulder (Figures 2 and 3 (27) is the bearing that has a shoulder) on the axle (Figures 2-3.) As seen in Figure 3, the axle extends in a direction from steering lever (23) opposite of that of the wiper blade (9).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Folberth et al., USPN 1,571,516.

Folberth et al. discloses all elements as mentioned above, however does not disclose that the steering lever (Figure 1 (15)) is made from sheet metal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

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5. Claims 1-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al., USPN 5,884,357 in view of Zimmer, DE 44 28 371.

Schill et al. discloses a four joint wiper arm for a windshield wiper system that comprises a drive lever (Figure 2 (4)) connected to and fixed against relative rotation to a drive shaft (Figure 2 (7)), a steering lever (Figure 2 (5)) connected to an axle (Figure 2 (11)) which is pivotally connected to a wiper lever (Figure 2 (6)) that is braced in the mounting direction (see arrangement direction in Figure 4). Schill et al. does not disclose specific pivotal connections such as one having levers braced in the mounting direction on a bearing shoulders.

Zimmer displays a connection between a shaft (or axle) (Figure 1 (10)) and a wiper "lever" (Figure 1 (14)) wherein the lever is braced in the mounting direction on a bearing shoulder (Figure 2 (26)) via a disk (Figure 2 (12)), and the disk is pressed by positive engagement onto the axle. The axle is joined solidly to the disk in the pivoting direction (see screw thread (Figure 2 (24) direction) in a clearance fit (clearance gaps evident in Figure 3). The lever positively surrounds the disk and has circumferential "side walls" (Figure 2 (34) is a side wall and Figure 3 displays the lever surrounding the disk. It appears from Figure 2 that the "side walls" are merging in the mounting direction (upwards) from a smaller cross sectional region to a larger cross sectional region. The axle has a region (Figure 2 (22) wherein the cross section deviates from radial symmetry. Further, Zimmer displays an axle that has a cross sectional region deviating from radial symmetry (Figure 2 (22)) and a pressure piece (Figure 2 (28)) placed between the axle and lever (Figure 3) that has an opening (Figure 2 (30)) that suits the

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cross sectional region and positively surrounds the axle (Figure 3) and has an outer cone (Figure 2 (34) is cone shaped) pressed within in it an inner cone (Figure 2 (28) and is fixed axially on the bearing shoulder (Figure 3.) The axle and pressure piece appear to be connected positively via from six load-bearing faces (Figure 2).

It would have been obvious for one of ordinary skill in the art to use the lever arrangement that Schill et al. teach and substituting the axles and securing connection structures for those that Zimmer teaches so that the positioning of levers to the axles is not affected by manufacturing tolerances and so that the connection is capable of transferring high torque independent of the tightness of the nut.

6. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schill et al., USPN 5,884,357 in view of Zimmer, DE 44 28 371.

Zimmer further discloses that the lever around the connection point to the axle has an indentation (Figure 2, dashed lines.) However, neither Zimmer nor Schill et al. disclose that the lever is a sheet metal part. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use sheet metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious engineering choice. In re Leshin, 125 USPQ 416.

Applicants Arguments

7. Applicants response Paper No. 7, filed 17 June 2003, argues that:

A. Folberth does not disclose and does not provide that the steering lever in a mounting direction can be braced on a bearing shoulder on an axle.

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B. Folberth does not disclose a "*steering wheel*" braced in a mounting direction on a bearing shoulder on an axle on the side of the steering lever which faces away of a wiper blade.

C. A bearing shoulder of Schill would contradict the purpose of a cone in creating a fixed connection.

Response to Arguments

8. Applicant's arguments filed 17 June 2003 have been fully considered but they are not persuasive.

A. Examiner modified the rejection based on Folberth et al. so that the bearing points of Folberth et al. are the same of the Applicant's as seen in Figure 1, (the drive lever is now (13), the drive shaft is (10), the steering lever is (23), and the wiper lever is (29)). As seen in Figure 2 of Folberth et al., the mounting direction is in an upward direction. Folberth et al. claim all elements disclosed above, however with this arrangement does not provide for a disk between the steering lever and bearing shoulder.

B. It is assumed that the Applicant in the argument intended "steering wheel" to mean "steering lever." Again, it is unclear what is meant by an axle being placed on a side of the steering lever which faces away of a wiper blade. As seen in Figure 3 of Folberth et al. the axle extends in a direction from steering lever (23) opposite of that of the wiper blade (9).

C. Schill et al. provides an arrangement of a steering lever, wiper lever, and a drive lever. Zimmer provides the teaching of the pivot structure so that the pivot (or

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shaft) is secured to the arm (or lever) to transfer a larger amount of torque. Applicant notes that the pivot points or axle locations of Schill et al. have a cone that would not provide a fixed connection. However, the combination of Schill et al. in view of Zimmer substitutes the entire pivot connection structure of Schill et al. for the axle or pivot assembly of Zimmer, as mentioned above, so that the shaft is fixed to the arm so as to transfer torque.

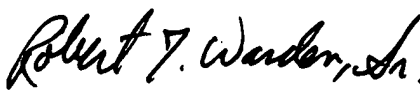
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (703) 305-7279. The examiner can normally be reached on Monday-Thursday, 7am - 4:30pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (703) 308-2920. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8772 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LCC
LCC
July 21, 2003


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